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Julian D. Cole
Principal Investigator
Mathematical Sciences Department
Rensselaer Polytechnic Institute
Troy, NY 12180

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The research results obtained during the year of this grant were reported in the following publications.

1. Xu, J.J., Pan, Z.X., and Cole, J.D., "Numerical investigation of global instability mechanism of dendrite growth," submitted to *EJAM*, 1993.
2. Xu, J.J., "Dendritic growth from a melt in an external flow: Uniformly valid asymptotic solution for steady state," *J. Fluid Mech.*, **263**, p. 227, 1994.
3. Xu, J.J., "Effect of convection motion in melt induced by density change on dendritic solidification," *Canadian J. of Phys.*, **72**, 3 & 4, p. 120, 1994.

Julian D. Cole
Principal Investigator